

Title: DRAFT Interpretation of 675 IAC Indiana Building Code, Section 3412.4.1.

This code section (with Indiana amendments shown italicized) is restated below for reference:

3412.4 Investigation and evaluation. For proposed work covered by this section, the building owner shall cause the existing building to be investigated and evaluated in accordance with the provisions of the section.

3412.4.1 *Structural Evaluation.* The owner *or the owner's agent* shall have a structural *evaluation* of the existing building made to determine adequacy of structural systems for the proposed *change of use* or change of occupancy. The evaluation shall demonstrate that the building with the work completed is capable of resisting the *minimum live* loads specified in Chapter 16.

Issue: The Commission has considered a number of variances requesting approval to perform a Chapter 34 analysis for conversion of an agricultural building (non-class 1 structure) for public assembly use. It has become apparent that although a structural evaluation of the subject building would be required in accordance with Section 3412.4.1, there is some confusion as to the extent of structural evaluation needed for situations where the building was not subject to the Indiana Building Code at the time of its original construction. For example, non-class 1 agricultural buildings have historically been exempt from the Indiana Building Code. As such, it is possible that the structural system for such a building was never completed by an Indiana licensed design professional. Subsequently, some may misinterpret Section 3412.4.1 to limit the structural evaluation to only an assessment of “minimum live loads specified in Chapter 16”, and not consider other loading conditions necessary for all Class 1 structures in Indiana. The Commission offers the following non-rule policy guidelines:

Commission Interpretation – Guidelines for Structural Evaluation (Section 3412.4.1)

Evidence must be provided to the Commission that the existing building under consideration has an adequate structural evaluation completed by an Indiana licensed design professional to assure that the building is safe for the proposed use or occupancy.

If the building was originally a non-class 1 structure, and if no evidence is provided to indicate that the structural system for the building had ever been designed by an Indiana licensed design professional, then the structural evaluation for the proposed use or occupancy must consider all applicable design loads specified in Chapter 16. This will include the minimum live loads (roof and floor) specified in Chapter 16 for the current Indiana Building Code as well as all other design loads required for class 1 buildings. In lieu of using current Chapter 16 non-live design loads, the Commission will permit the use of non-live design loads required by the Indiana Building Code in effect for class 1 buildings at the time of original construction. This would include consideration for design loads such as wind, snow, earthquake, dead, ice, rain, soil, and flood.

If the building was originally a non-class 1 structure, but evidence is provided that the structural system for the building was originally designed by an Indiana licensed design professional to comply with the structural provisions of the Indiana Building Code in effect at the time of construction, then the structural evaluation for the proposed use or occupancy would consist of an inspection by an Indiana licensed design professional and any related work deemed necessary to determine the adequacy of structural systems for the proposed use. Provided that the proposed use does not reduce the existing building's capacity to withstand the non-live design loads that were required at the time of its construction, and if the condition of the building structure is demonstrated to be structurally sound, then an exhaustive evaluation of all non-live load conditions need not be performed.